

1. A method of stabilizing a torsion oscillator during continuous, repetitive normal operation comprising,
driving said oscillator substantially at a first, resonant frequency of said oscillator, said oscillator having a first amplitude,
5 observing said oscillator for change in the resonant frequency of said oscillator,
continuing to drive said oscillator substantially at said first frequency while changing drive level to said oscillator to substantially maintain said first amplitude of said oscillator, and
10 continuing said observing and said changing drive level to substantially maintain said first amplitude during said continuous repetitive normal operation of said oscillator.
2. The method as in claim 1 in which said observing is by determining the amplitude of oscillations of said torsion oscillator.
3. The method as in claim 1 in which said torsion oscillator supports a mirror and said determining is by observing light reflected from said mirror as said mirror is rotated by said torsion oscillator.
4. The method as in claim 2 in which said torsion oscillator supports a mirror and said determining is by observing light reflected from said mirror as said mirror is rotated by said torsion oscillator.
5. The method as in claim 1 in which said continuing to drive said oscillator includes the step of adjusting the median offset of said oscillator by changing the median of said drive level.
6. The method as in claim 2 in which said continuing to drive said oscillator

includes the step of adjusting the median offset of said oscillator by changing the median of said drive level.

7. The method as in claim 3 in which said continuing to drive said oscillator includes the step of adjusting the median offset of said oscillator by changing the median of said drive level.

8. The method as in claim 4 in which said continuing to drive said oscillator includes the step of adjusting the median offset of said oscillator by changing the median of said drive level.

9. A method of stabilizing a torsion oscillator during continuous, repetitive normal operation comprising,

driving said oscillator at an offset frequency close to the resonant frequency of said oscillator,

5 observing said oscillator for change in the resonant frequency of said oscillator,

changing said offset frequency to be offset close to said changed resonant frequency,

and continuing said observing and said changing said offset during said continuous repetitive normal operation of said oscillator.

10. The method as in claim 9 in which said observing is by determining the amplitude of oscillations of said torsion oscillator.

11. The method as in claim 9 in which said torsion oscillator supports a mirror and said determining is by observing light reflected from said mirror as said mirror is rotated by said torsion oscillator.



12. The method as in claim 10 in which said torsion oscillator supports a mirror and said determining of amplitude is by observing light reflected from said mirror at least two, separated sensors as said mirror is rotated by said torsion oscillator.